**IN THE CLAIMS:**

Please amend the claims pursuant to 37 C.F.R. 1.121 as follows (see the accompanying "marked up" version pursuant to 1.121):

47. (Twice Amended) An isolated nucleic acid which encodes human presenilin-associated membrane protein (PAMP) as set forth in SEQ ID NO:14.

49. (Twice Amended) The isolated nucleic acid of claim 47, which comprises a nucleotide sequence encoding human PAMP as set forth in SEQ ID NO:13.

52. (Twice Amended) An isolated cell transfected with a vector, which vector comprises a nucleic acid encoding a PAMP having at least 90% amino acid identity to SEQ ID NO: 14 and being capable of interacting with a presenilin.

53. (Twice Amended) The isolated cell of claim 52, wherein the nucleic acid comprises a nucleotide sequence encoding human PAMP as set forth in SEQ ID NO:13.

54. (Twice amended) A method for producing a variant of human PAMP, which method comprises culturing the cell of claim 52 under conditions that permit expression of the PAMP variant.

56. (Twice Amended) An isolated nucleic acid encoding a mutant PAMP, wherein the mutant PAMP has a mutation in an amino acid residue corresponding to an amino acid selected from the group consisting of C230, D336,

Y337, and both D336 and Y337, of human PAMP as set forth in SEQ ID NO:14.

58. (Amended) An isolated nucleic acid encoding a mutant human PAMP less capable than human PAMP as set forth in SEQ ID NO:14 of interacting with a presenilin protein, wherein the mutant PAMP has a deletion of an amino acid sequence corresponding to Δ312-369 or Δ312-340 of SEQ ID NO:14.

47. An isolated nucleic acid which encodes human presenilin-associated membrane protein (PAMP) as set forth in SEQ ID NO:14.

49. The isolated nucleic acid of claim 47, which comprises a nucleotide sequence encoding human PAMP as set forth in SEQ ID NO:13.

50. A vector comprising the nucleic acid of claim 47, operatively associated with an expression control sequence.

52. An isolated cell transfected with a vector, which vector comprises a nucleic acid encoding a variant of human PAMP having at least 90% amino acid identity to SEQ ID NO: 14 and being capable of interacting with a presenilin.

53. The isolated cell of claim 52, wherein the nucleic acid comprises a nucleotide sequence encoding human PAMP as set forth in SEQ ID NO:13.

54. A method for producing a variant of human PAMP, which method comprises culturing the cell of claim 52 under conditions that permit expression of the PAMP variant.

56. An isolated nucleic acid encoding a mutant PAMP, wherein the mutant PAMP has a mutation in an amino acid residue corresponding to an amino acid selected from the group consisting of C230, D336, Y337, and both D336 and

Y337, of human PAMP as set forth in SEQ ID NO:14.

58. An isolated nucleic acid encoding a mutant human PAMP less capable than human PAMP as set forth in SEQ ID NO:14 of interacting with a presenilin protein, wherein the mutant PAMP has a deletion of an amino acid sequence corresponding to Δ312-369 or Δ312-340 of human PAMP as set forth in SEQ ID NO:14.

59. A vector comprising the nucleic acid of claim 56, operatively associated with an expression control sequence.

60. An isolated cell transfected with the vector of claim 59.

63. The isolated cell of claim 52, wherein the human PAMP has SEQ ID NO: 14.

65. A method for producing human PAMP, which method comprises culturing the cell of claim 63 under conditions that permit expression of the human PAMP.

**Marked-Up Claims**
Accompanying April 30, 2003 Amendment
For U.S. Serial No. 09/541,094
Docket No. 1034/1F812-US2

**IN THE CLAIMS:**

47. (Twice Amended) An isolated nucleic acid which encodes human presenilin-associated membrane protein (PAMP) as set forth in [()]SEQ ID NO:14[())].

49. (Twice Amended) The isolated nucleic acid of claim 47, which comprises a nucleotide sequence encoding human PAMP as set forth in [()]SEQ ID NO:13[())].

52. (Amended) An isolated cell transfected with a vector, which vector comprises a nucleic acid encoding a [function-conservative variant of human] PAMP having at least [60%] 90% amino acid identity to SEQ ID NO: 14 and being capable of interacting with a presenilin.

53. (Twice Amended) The isolated cell of claim 52, wherein the nucleic acid comprises a nucleotide sequence encoding human PAMP as set forth in [()]SEQ ID NO:13[())].

54. A method for producing a [function-conservative] variant of human PAMP, which method comprises culturing the cell of claim 52 under conditions that permit expression of the PAMP variant.

56. (Twice Amended) An isolated nucleic acid encoding a mutant PAMP, wherein the mutant PAMP has a mutation in an amino acid residue

corresponding to an amino acid selected from the group consisting of C230, D336, Y337, and both D336 and Y337, of human PAMP as set forth in [(]SEQ ID NO:14[)].

58. (Amended) [The isolated nucleic acid of claim 55,] An isolated nucleic acid encoding a mutant human PAMP less capable than human PAMP as set forth in SEQ ID NO:14 of interacting with a presenilin protein, wherein the mutant PAMP has a deletion of an amino acid sequence corresponding to [an amino acid sequence selected from the group consisting of] Δ312-369 and Δ312-340 of [human PAMP] [(]SEQ ID NO:14[)].